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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/058,482	01/28/2002	J. William Whitehart	V201-0143	3272

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EXAMINER

PHAN, HUY Q

ART UNIT	PAPER NUMBER
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2685

DATE MAILED: 08/17/2004

5

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/058,482

**Applicant(s)**

WHIKEHART ET AL.

**Examiner**

Huy Q Phan

**Art Unit**

2685

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2002.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-3, 5-9 and 11-15 is/are rejected.  
7) ☒ Claim(s) 4 and 10 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 1, 3 and 8 are objected.

Claim 1 is objected to because of all the first letters of the steps need to be changed to lower case letters.

Claims 3 and 8 are objected to because of the following informalities:

Claims 3 and 8 are duplicated.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3, 6-9, 12, 14 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Velazquez et al. (US-2001/0003443).

Regarding claim 1, Velazquez et al. disclose in figure 9, a method of controlling an antenna signal combiner in a vehicle (30) having multiple antenna elements (35' and see [0058]), a navigational system (350) and a receiver (312) comprising the steps of:

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receiving signals from at least one transmitter (from base station 20 see fig. 9 and [0057]);

determining first position coordinates of said vehicle using said navigational system (from GPS location signal and see [0057]-[0058]);

determining second position coordinates of said at least one transmitter (from base station location signal and see [0057]-[0058]);

combining signals from said multiple antenna elements to steer an antenna beam from said first position coordinates to said second position coordinates [0058].

Regarding claims 3 and 8, Velazquez et al. disclose a method as recited in the rejection of claim 1, wherein said first position coordinates are derived from a GPS receiver (fig. 9, box 350 and see [0055]).

Regarding claim 6, Velazquez et al. disclose a method as recited in the rejection of claim 1, wherein said second position coordinates are broadcast by said at least one transmitter (fig. 9, box 214 and see [0059]).

Regarding claim 7, Velazquez et al. disclose a method as recited in the rejection of claim 1, wherein said second position coordinates are derived using triangulation [0056].

Regarding claim 9, Velazquez et al. disclose in figure 9, a broadcast

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receiver for a vehicle (30) having multiple antenna elements for receiving broadcast signals comprising:

- a vehicle localizer generating first position coordinates (from GPS location signal and see [0057]-[0058]);

- a broadcast transmitter localizer generating second position coordinates (from base station location signal and see [0057]-[0058]); and

- an antenna signal combiner steering an effective antenna beam from said first position coordinates toward said second position coordinates [0058].

Regarding claim 12, Velazquez et al. disclose a broadcast receiver as recited in the rejection of claim 9, wherein said second position coordinates are derived from a broadcast transmitter localizer comprising a database having locations of predetermined broadcast transmitters (inherently to the stored location of the current base station, see [0058].

Regarding claim 14, Velazquez et al. disclose a broadcast receiver as recited in the rejection of claim 9, wherein said second position coordinates are calculated using triangulation [0056].

Regarding claim 15, Velazquez et al. disclose a broadcast receiver as recited in the rejection of claim 9, wherein said first position coordinates are derived from a GPS receiver (fig. 9, box 350 and see [0055]).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Velazquez et al. in view of Kamel et al. (US-4,688,092).

Regarding claim 2, Velazquez et al. disclose a method as recited in the rejection of claim 1. But, fail to expressly teach wherein said second position coordinates are determined using Keplerian elements. However in analogous art, Kamel et al. teach Keplerian elements being used in navigational system. Since, Velazquez et al. and Kamel et al. are related to navigational system; therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Velazquez et al. by specifically determining position coordinates being used Keplerian elements as taught by Kamel et al. in order to determine accurately the latitude and longitude of the vehicle in the most preferable technique.

5. Claims 5 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Velazquez et al.

Regarding claims 5 and 9, Velazquez et al. disclose a method and a broadcast receiver as recited in the rejections of claims 1 and 9 respectively,

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Velazquez et al. disclose the user's position being stored [0008] But, Velazquez et al. do not particularly show wherein said second position coordinates are derived from a manual input. However, the examiner takes official notice that it is well known in the art to input the data by the operator. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the method of Velazquez et al. by specifically having position coordinates being derived from a manual input for purpose of inputting manually the data by the operator where the manual input is favorable or the system has not been computerized.

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Velazquez et al. in view of Asanuma et al. (US-5,027,302).

Regarding claim 11, Velazquez et al. disclose a broadcast receiver as recited in the rejection of claim 9. But, Velazquez et al. fails to expressly teach wherein first position coordinates are derived from a vehicle localizer comprising a tire rotation monitor and a vehicle turn indicator. However in analogous art, Asanuma et al. teach a navigation system for determining vehicle position by monitoring tire rotation and detecting vehicle direction (fig. 1 and col. 2, lines 11-64). Since, Velazquez et al. and Asanuma et al. are related to method for determination of vehicle location; therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Velazquez et al. by specifically having a navigation system for determining vehicle position by monitoring tire rotation and detecting vehicle direction as

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taught by Asanuma et al. for purpose of determining advantageously location of the vehicle where the GPS is not utilized.

***Allowable Subject Matter***

7. Claims 4 and 10 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a) Turcotte et al. (US-5,754,139) disclose beam forming system.
- b) Casabona et al. (US-5,872,540) disclose GPS receiver and antenna.
- c) Houston et al. (US-2001/0018327) disclose spot beams.
- d) Kurby et al. (US-5,559,806) disclose steerable antenna.
- e) Rapeli et al (US-6,195,559) disclose beam control in communication.
- f) Basile (US-6,298,243) discloses GPS and cellular antenna.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huy Q Phan whose telephone number is 703-305-9007. The examiner can normally be reached on 8AM-5PM.



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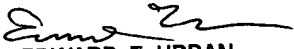
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Urban F Edward can be reached on 703-305-4385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phan, Huy Q

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Date: Aug. 06, 2004

  
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SUPERVISORY PATENT EXAMINER  
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